# Basic Damage Assessment / Windshield Survey and Communications Training
# July 21, 2012
# 0900-1200

- Washington Disasters
- Damages Assessment Training
- Windshield Survey

Emergency Preparedness Website
www.mercergov.org/emergencyprep

# Disasters that can effect our area.

- Disasters are relatively unexpected, emergency personnel may be overwhelmed, lives, health, and the environment are endangered.
- Disasters consist of Natural, Manmade, Technological**.**

**Natural:** Earthquakes, winter storms, landslides, Seiche, volcanoes, flooding, (pandemics), power outages.

**Manmade:** Terrorist attacks, hazardous material spills, large scale accidents, etc.

**Technological**

# BE PREPARED TO TAKE CARE OF YOURSELF, YOUR FAMILY FOR 7 DAYS

## Prepare before a disaster: 7 days (House Kit, Car Kit, Work Kit)

**Know where your water shut off is, how to turn off your gas, circuit box and most of all – Know your neighbors!**

**Mercer Island** **www.mercergov.org/emergencyprep**

## Take safety precautions during a disaster.

**Drop/ Cover/ Hold**

## Take care of yourself, family, home and Pets.

Dress for safety: Heavy soled shoes, leather gloves, hard hat, flashlight.
If you smell gas shut off gas. (make sure you have a wrench, know how and where the meter is at)
Turn off electrical at circuit box
Shut off water at main house valve or at main valve at street
Call out of state contact to check on family members if phone systems are disrupted locally.
Tune into KIRO radio station (KIRO 710AM) or MIHS Radio station 88.9FM with battery operated radio for info.
Check on neighbors to see if OK
If willing, volunteer at your city to assist those in need. (**206-275-7600 – EOC Phone Number**)

if you are off Island, have you planned for someone to take care of your kids/ family if you can't get back on the Island?

Kit in your house, car, workplace?

Wrench on gas meter? Know how to turn off your utilities, water?

Fire Extinguishers in house? Smoke detectors working?

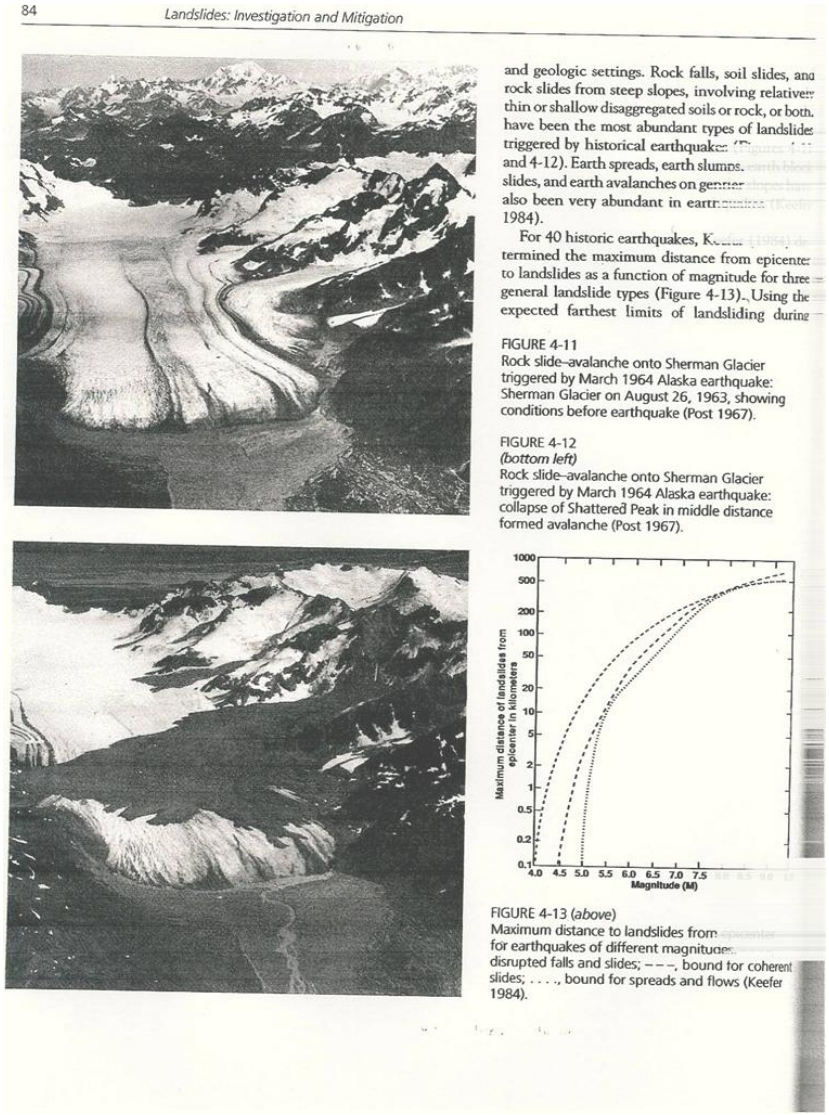
**Currently One shelter site, the community center at Mercer View 8236 SE 24th**

Faith community may assist with additional warming / cooling areas – signs will be posted at intersections for further information.

**Damage Assessment Team: Don Cole and Steve Bryan**
Inspectors – Don Cole
Windshield Survey – George Steirer
Damage Assessment Volunteer Lead – John Nielsen

# Puget Sound Geology

- Glaciers came and went
- Compacting soils as the glacier came down from BC
- At one point the glaciers were 3000 feet high at Mercer Island



84 Landslides: Investigation and Mitigation

and geologic settings. Rock falls, soil slides, and rock slides from steep slopes, involving relatively thin or shallow disaggregated soils or rock, or both, have been the most abundant types of landslides triggered by historical earthquakes (Figures 4-11 and 4-12). Earth spreads, earth slumps, slides, and earth avalanches on gentler slopes also been very abundant in earthquakes (Keefer 1984).

For 40 historic earthquakes, Keefer determined the maximum distance from epicenter to landslides as a function of magnitude for three general landslide types (Figure 4-13). Using the expected farthest limits of landsliding during

FIGURE 4-11
Rock slide–avalanche onto Sherman Glacier triggered by March 1964 Alaska earthquake: Sherman Glacier on August 26, 1963, showing conditions before earthquake (Post 1967).

FIGURE 4-12
*(bottom left)*
Rock slide–avalanche onto Sherman Glacier triggered by March 1964 Alaska earthquake: collapse of Shattered Peak in middle distance formed avalanche (Post 1967).



FIGURE 4-13 *(above)*
Maximum distance to landslides from for earthquakes of different magnitudes disrupted falls and slides; – – –, bound for coherent slides; . . . ., bound for spreads and flows (Keefer 1984).

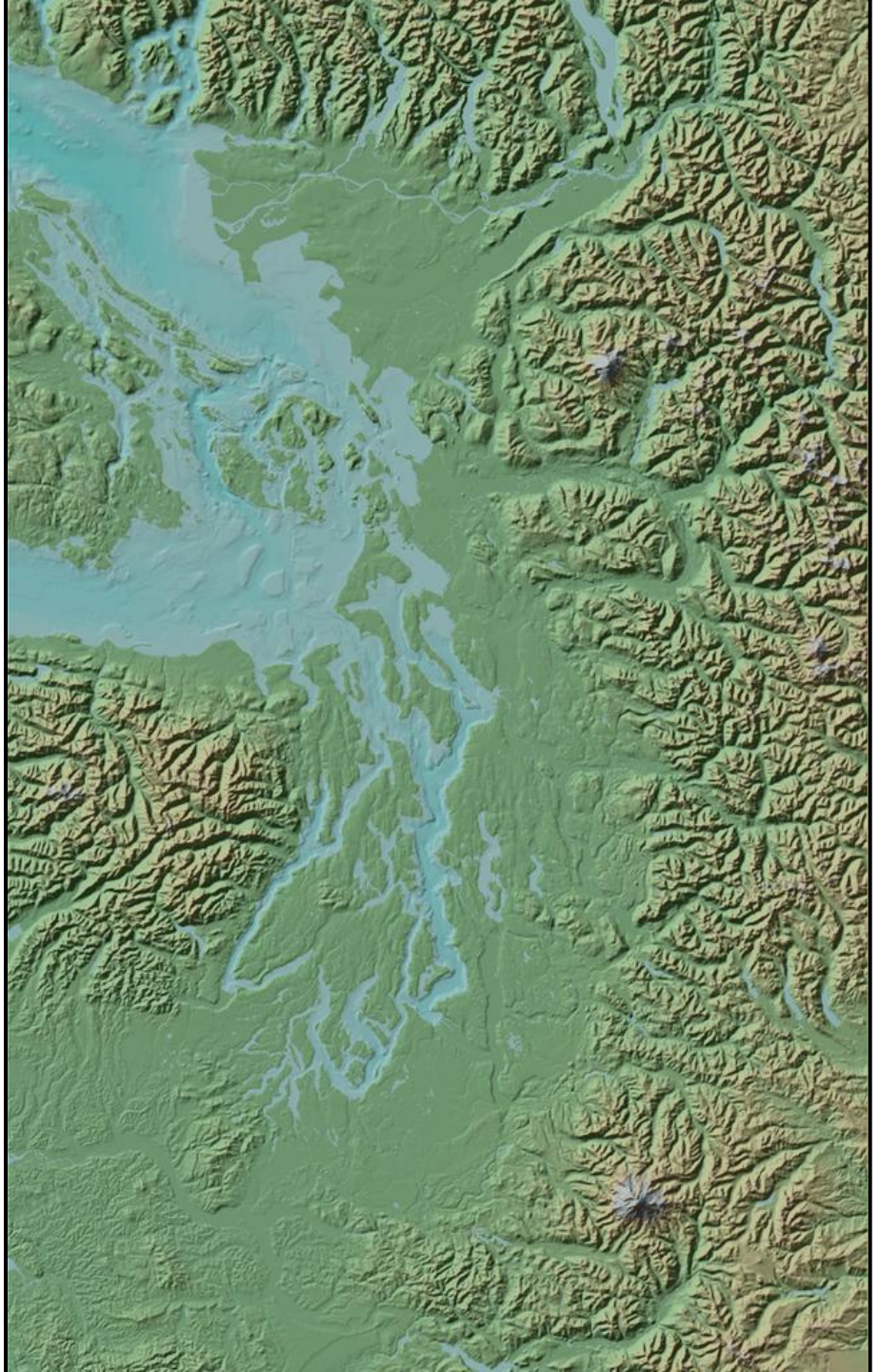
# Puget Sound Geology

- Leaving looser soils as the glacier receded

# Geologic Setting

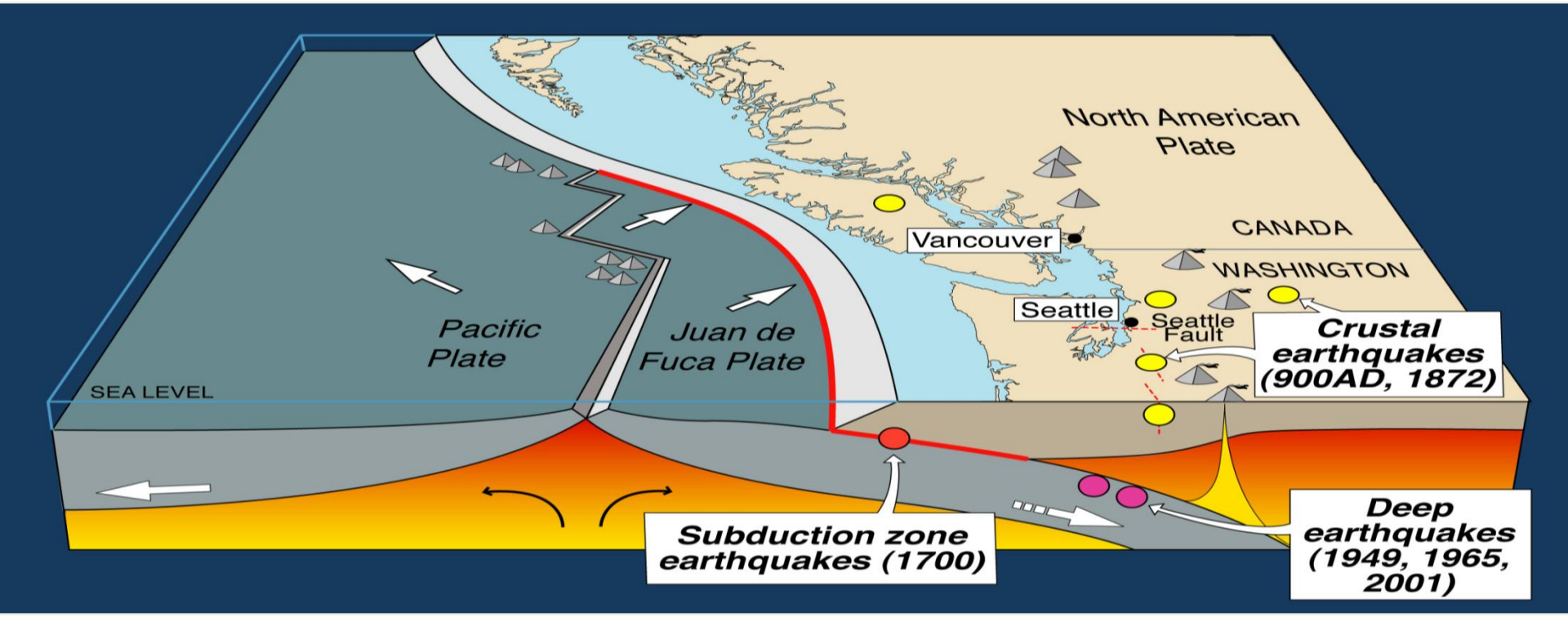
What glaciers have created are the potential for:

- Earthquakes
- Active volcanoes
- Bedrock basins and loose soils
- Active faulting



Map by Ralph Haugerud, 2003

# Cascadia earthquake sources



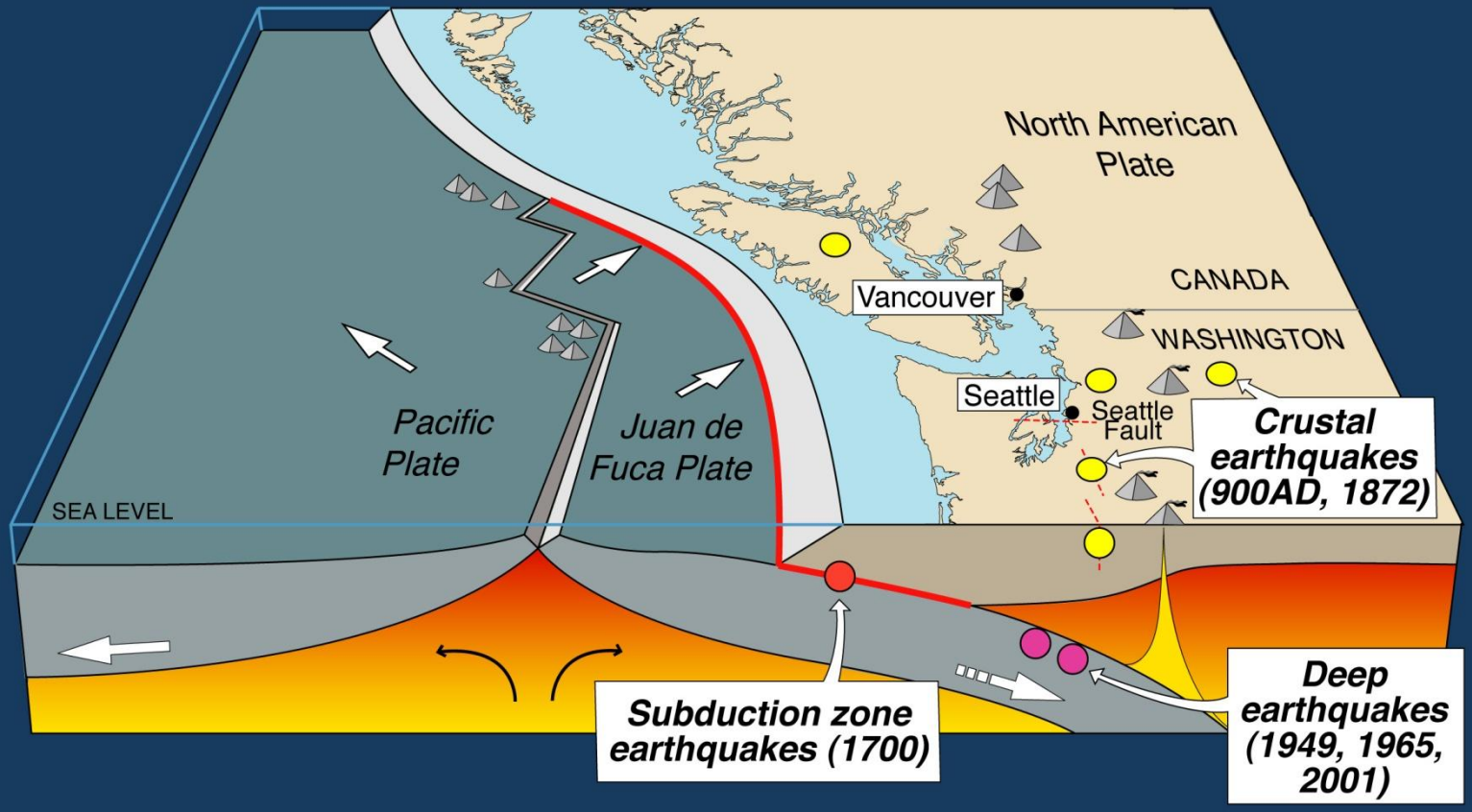

**An Earthquake is a sudden slipping or movement of a portion of the Earth's crust, caused by a sudden release of stresses, usually less than 25 miles below the surface.**

**Subduction Zone (Cascadia)** - (Juan de Fuca Plate diving under the North American Plate) Mega Quakes (like Chile) happens approx. every 300 years. Last one struck in 1700

**Deep (Juan de Fuca Plate) –** Happens every 30 -50 years (1949, 1965, 2001)

**Crustal Faults (Seattle Fault Zone )–** (900 AD, 1872)

# Cascadia earthquake sources




| Source | Affected area | Max.Size | Recurrence |
|---|---|---|---|
| Subduction Zone | W. WA, OR, CA | M 9 | 500-600 yr |
| Deep JdF plate | W. WA, OR | M 7 | 30-50 yr |
| Crustal faults | WA, OR, CA | M 7? | ? |

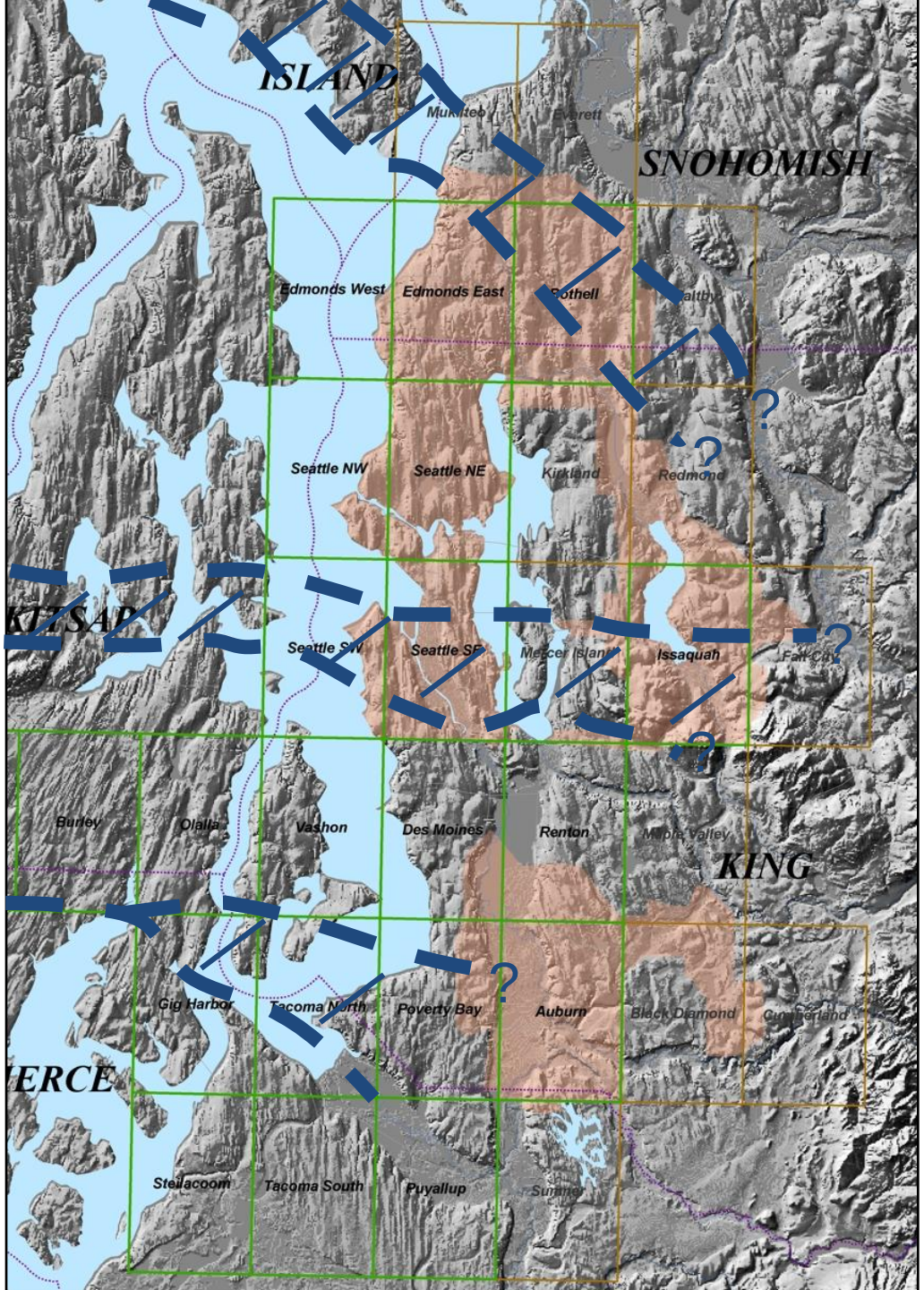
South Whidbey Island Fault Zone

# Active faults in the Puget Lowland

Seattle Fault Zone

Tacoma Fault Zone

Puget Sound has thousands of small quakes every year! (< M3)



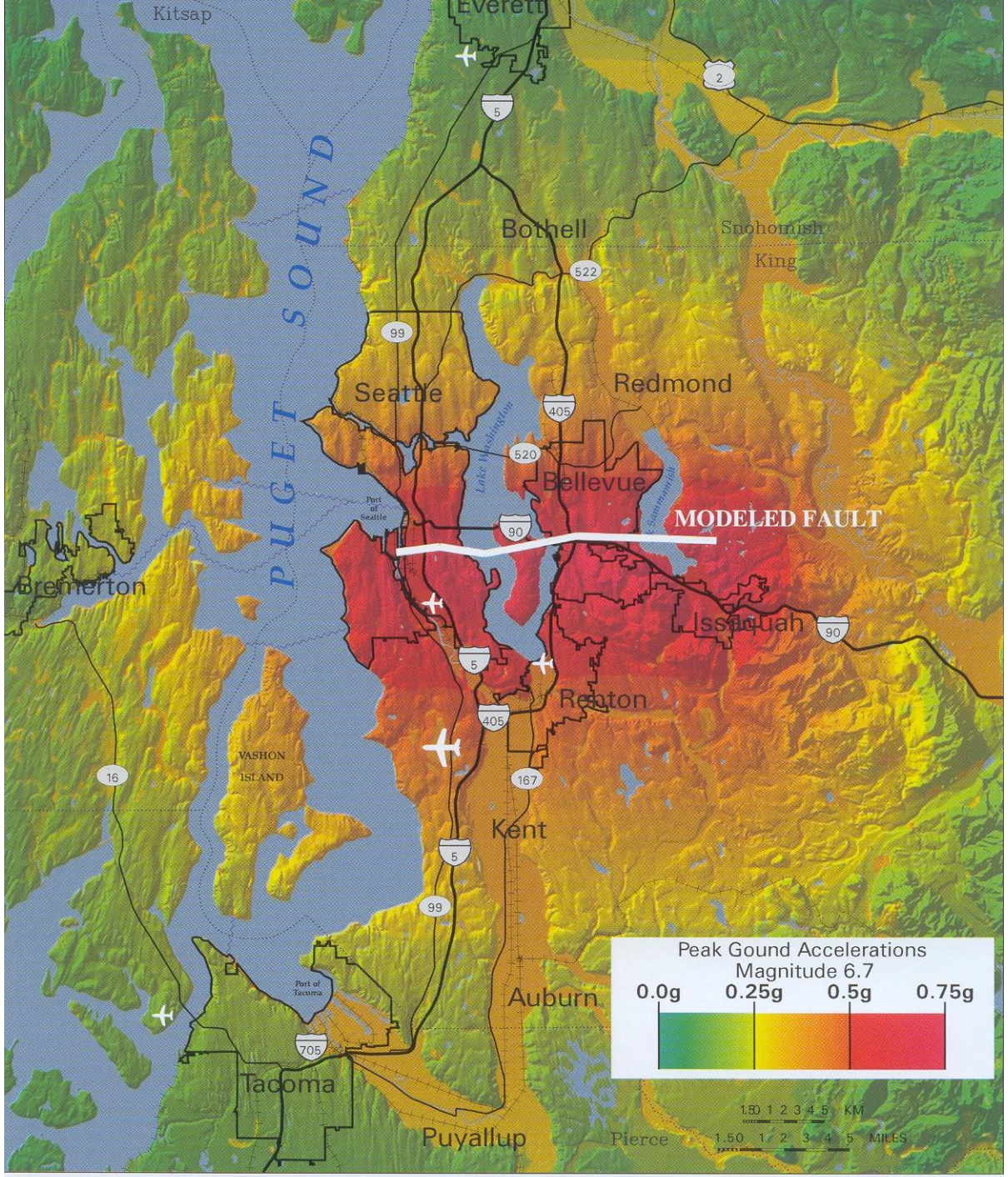



*Figure 1-9: Peak ground accelerations for Seattle Fault scenario earthquake using soils map*

# Peak Ground Accelerations Map

# MI Seismic map

- Identifies soils prone to liquefaction, lateral spreading, ground settlement, earthquake induced landslides, etc.
- Current use of identified areas:
  - Town Center
  - Primary transportation routes
  - Schools
  - City hall

# Mercer Island Seismic Hazard Assessment

by Kathy G. Troost & Aaron P. Wisher
April 2009

GeoMapNW
geomapnw.ess.washington.edu

0 0.5 1 Kilometers 1:12,000
0 0.5 1 Miles

N

## SEISMIC HAZARD AREAS (MICC 19.16.010)

Seismic Hazard areas are those areas subject to severe risk of damage as a result of earthquake -induced ground shaking, slope failure, settlement, soil liquefaction or surface faulting.

**Seismic Hazard**
- Seismic Hazard Area (Known or Suspect)

**For all other areas risk is unknown or limited to ground shaking**

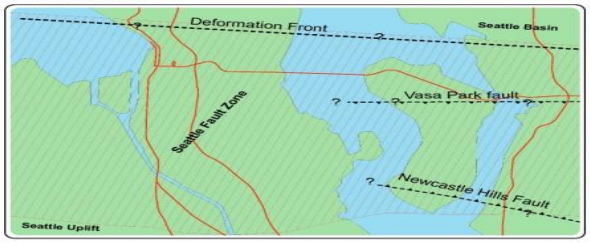
**Supplemental Data**

Potential for seismically induced ground failures including settlement, cracking, lateral spreading, liquefaction due to ground shaking.
Seismically hazardous areas include the following:

**Seismically Hazardous Areas**
- High Potential for seismically induced ground failures (Poorly consolidated, see note below)
- Moderate Potential for seismically induced ground failures (Moderately consolidated, see note below)
- Scarp
- Landslide and Mass Wastage Deposits (subaerial & subaqueous)
- Modified land

**Documented Earthquake Ground Effects**
- Miscellaneous Ground Effects of the 2001 Nisqually Earthquake (Approx. Area)
- Ground Settlement from the 1965 Earthquake (Approx. Area)
- Miscellaneous Ground Effects of the 1949 Earthquake (Approx. Area)

## ACTIVE FAULTS




Mercer Island falls within the Seattle fault zone and at least two stands of the Seattle fault cross the island. No direct evidence of surface fault rupture has yet been documented for Mercer Island (Troost and Wisher, 2006).

The Seattle Fault Zone is the area where several parallel strands of the Seattle fault have either broken the ground surface or caused deformation of geologic materials. Earthquakes of magnitude M7 or greater have occurred on some of these fault strands within the Holocene (last 10,000 years) and will likely occur again (Blakely, et al., 2002; Sherrod 2002; 2005). The Seattle Fault Zone is one of several active crustal faults zones in the Puget Lowland currently undergoing research.

On Mercer Island, evidence for movement along these fault strands consists of exposures of deformed sedimentary strata and geophysical images of folded and faulted strata (Troost and Wisher, 2006; Stephenson et al., 2007). Elsewhere in the Puget Sound lowland, evidence for movement on the fault strands consists of uplifted beach deposits, down-dropped tidal marshes, offset strata, fault scarps, and deformation such as sheared and tightly folded strata. Evidence of the Seattle fault zone in the subsurface consists of aeromagnetic, gravitational, and seismic reflection anomalies (Liberty and Pratt, 2008).

East of Mercer Island, the Vasa Park fault and Newcastle Hills fault each have surface expression in the form of fault scarps and subsurface expression in the form of magnetic and seismic linear anomalies (Liberty and Pratt, 2008; Sherrod, 2002). The magnetic and seismic anomalies may be continuous with similar features to the west of Lake Washington, but those continuities are not firmly established (Liberty and Pratt, 2008). The locations of these faults are not well defined on Mercer Island (Pratt, 2009, pers. comm.)

The Deformation Front is an east-west-trending, convex-upward fold in geologic strata, where those strata drape over the northern-most thrust fault in the Seattle Fault Zone. North of the Deformation Front is the Seattle Basin, where strata lie nearly flat; south of the Deformation Front the strata dip down toward the north beneath the Seattle Uplift (Pratt, 2009). The location of the Deformation Front was moved northward from previous interpretations (Brocher, et al, 2004) following detailed evaluation of seismic lines by Pratt (2009).

## Notes: Degree of consolidation

Geologic materials were assessed then classified as either strongly, moderately, or poorly consolidated. Degree of consolidation is a direct translation of geologic unit based on geologic history and predominant lithology. Because considerable variability exists within each geologic unit, more detailed analysis is needed for site-specific evaluations or to evaluate the degree of consolidation at a larger scale than provided. Slope and degree of saturation also affect the degree of consolidation, but have not been factored into this map. This qualitative assessment should be used to evaluate and understand the character of the island as a whole. These data should not be used for purposes of site-specific land-use planning or site-specific geologic evaluations. The classification shown on the map does not account for the built environment and impervious surfaces.

## GENERAL NOTES FOR GEOLOGICAL HAZARDS MAPS

This map is one of a suite of revised Geological Hazard Maps for the City of Mercer Island. This suite includes maps showing Seismic Hazards, Landslide Hazards, and Erosion Hazards.

Other geological and/or natural hazards may exist and geological events may occur on Mercer Island that are not specifically identified on these maps. Examples of geologic hazards and hazardous events that are not identified on these maps include, but are not limited to, tsunamis and seiches in Lake Washington.

These maps are for the sole use of the staff of the City of Mercer Island's Development Services Group (DSG) for the purposes of permit application evaluation. These maps provide DSG staff a general assessment of known or suspect geological hazard areas for which the City will require site and project-specific evaluation by a Washington State-licensed engineer, geologist or engineering geologist prior to issuing a permit for site development. All areas have not been specifically evaluated for geologic hazards and there may be locations that are not correctly represented on these maps. It is the responsibility of individual property owners and map users to evaluate the risk associated with their proposed development. No site-specific assessment of risk is implied or otherwise indicated by the City of Mercer Island by these maps.

The City of Mercer Island is using guidance provided by the State of Washington regarding the definition of geologically hazardous areas in accordance with WAC 365-190-080 and the Growth Management Act. "Geologically hazardous areas", by State definition, "include areas susceptible to erosion, sliding, earthquake, or other geological events. They pose a threat to the health and safety of citizens when incompatible commercial, residential, or industrial development is sited in areas of significant hazard."

This new set of maps represents an update of the 2002 Geologic Hazard Map Series and is based on a review of Best Available Science for the Seattle Fault and related events, a new Geological Map of Mercer Island by Troost and Wisher (2006), and a geologic database of Mercer Island compiled by GeoMapNW at the University of Washington. Information about data used for the maps, references, and data limitations are all described in an associated "Read Me" document. The digital version of these maps is accompanied by a meta data file containing pertinent information about map construction. These data and maps are all available on the City of Mercer Island website.

# Significant Changes

**Seattle fault zone added:**

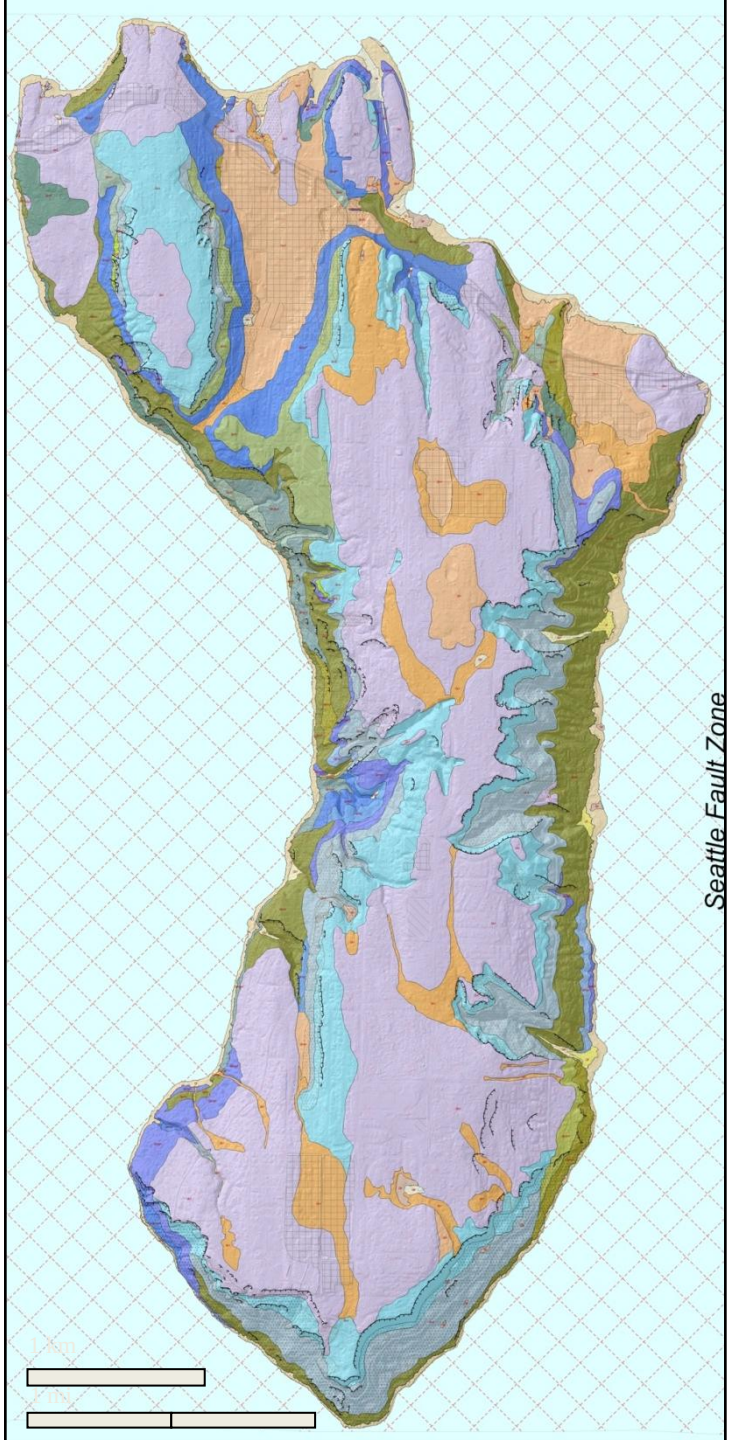
More areas of weak ground

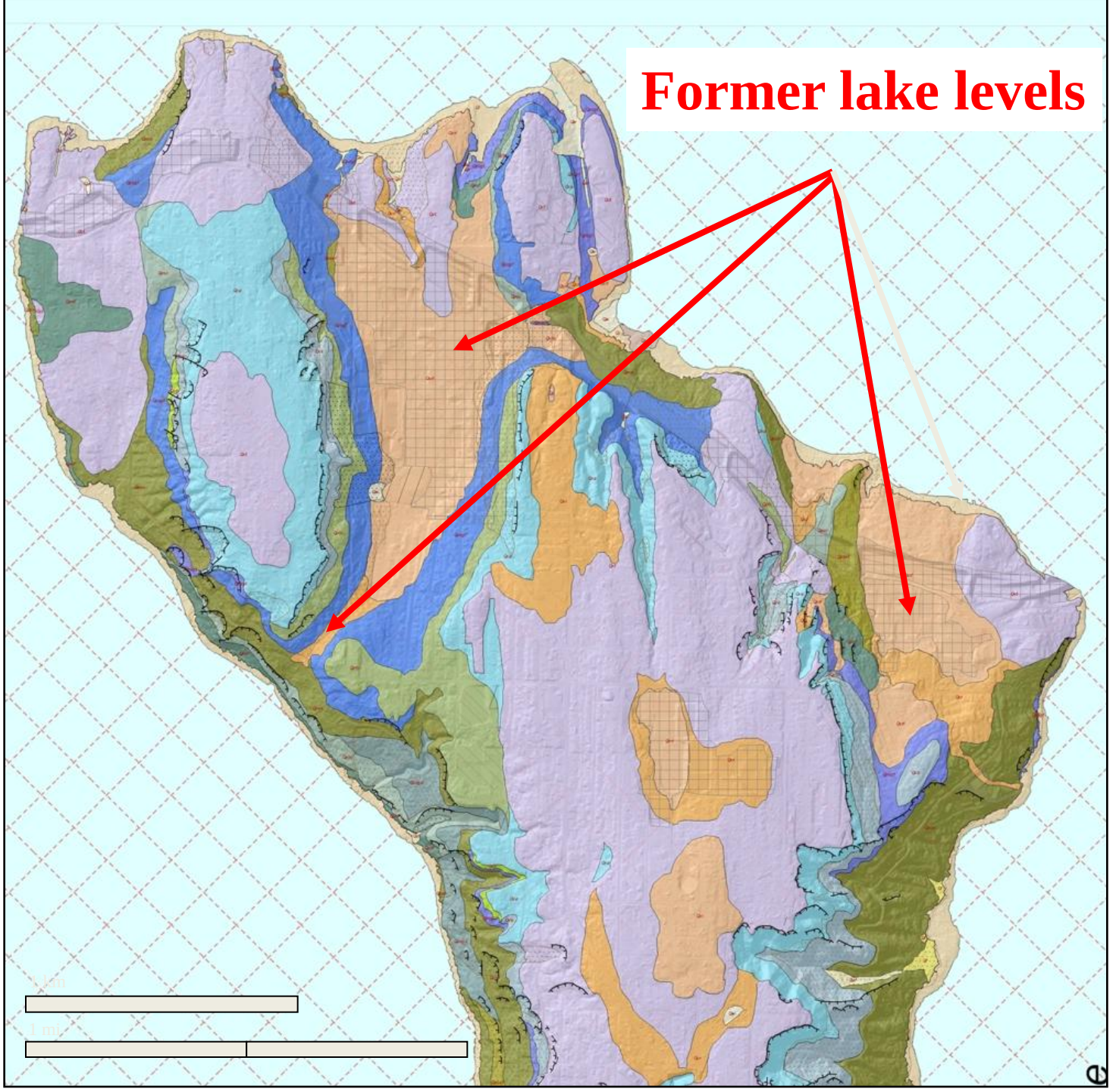
More areas of sandy ground

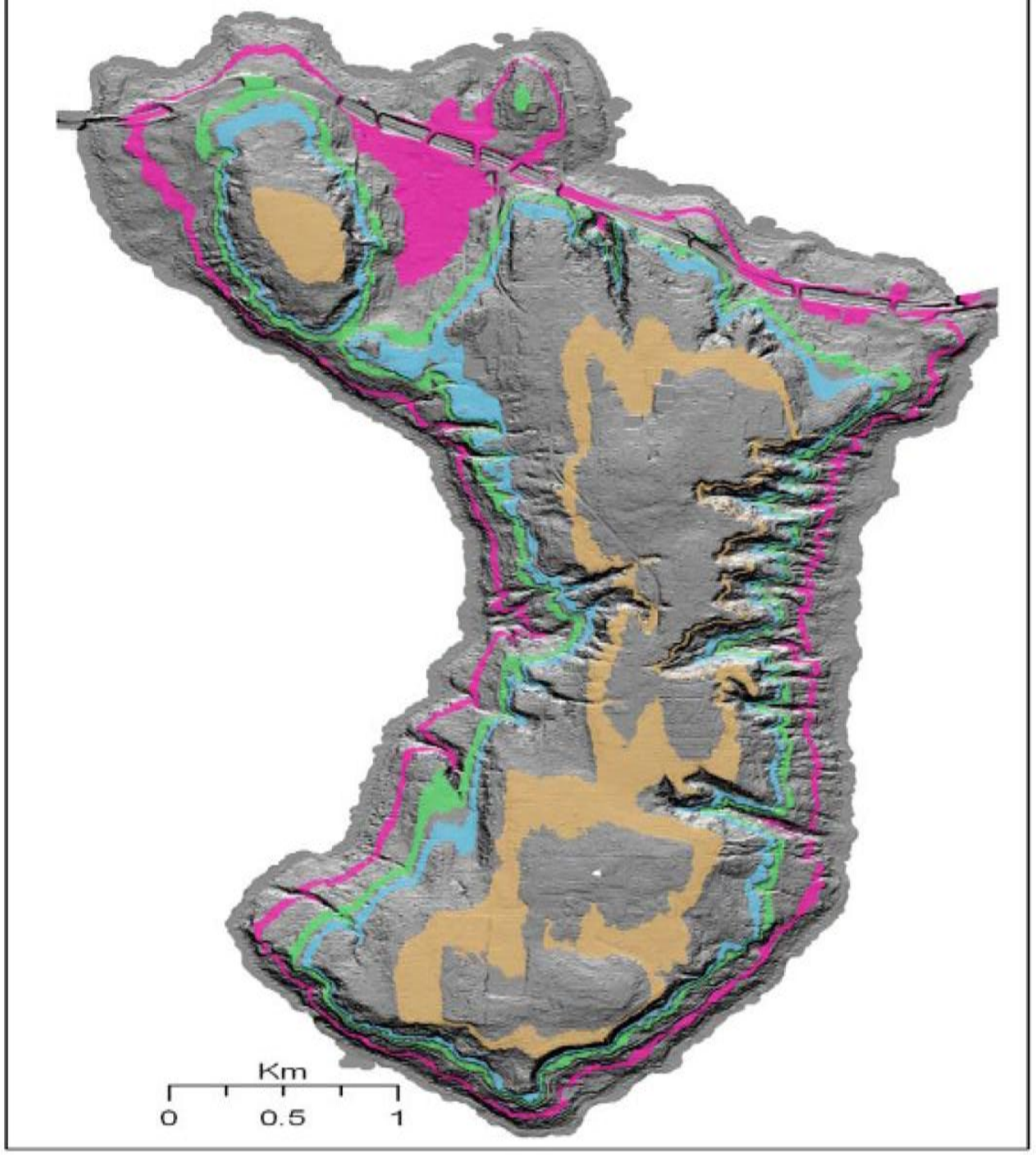
Former lake beds identified

Fill mapped as overprint

Mass wastage mapped as overprint

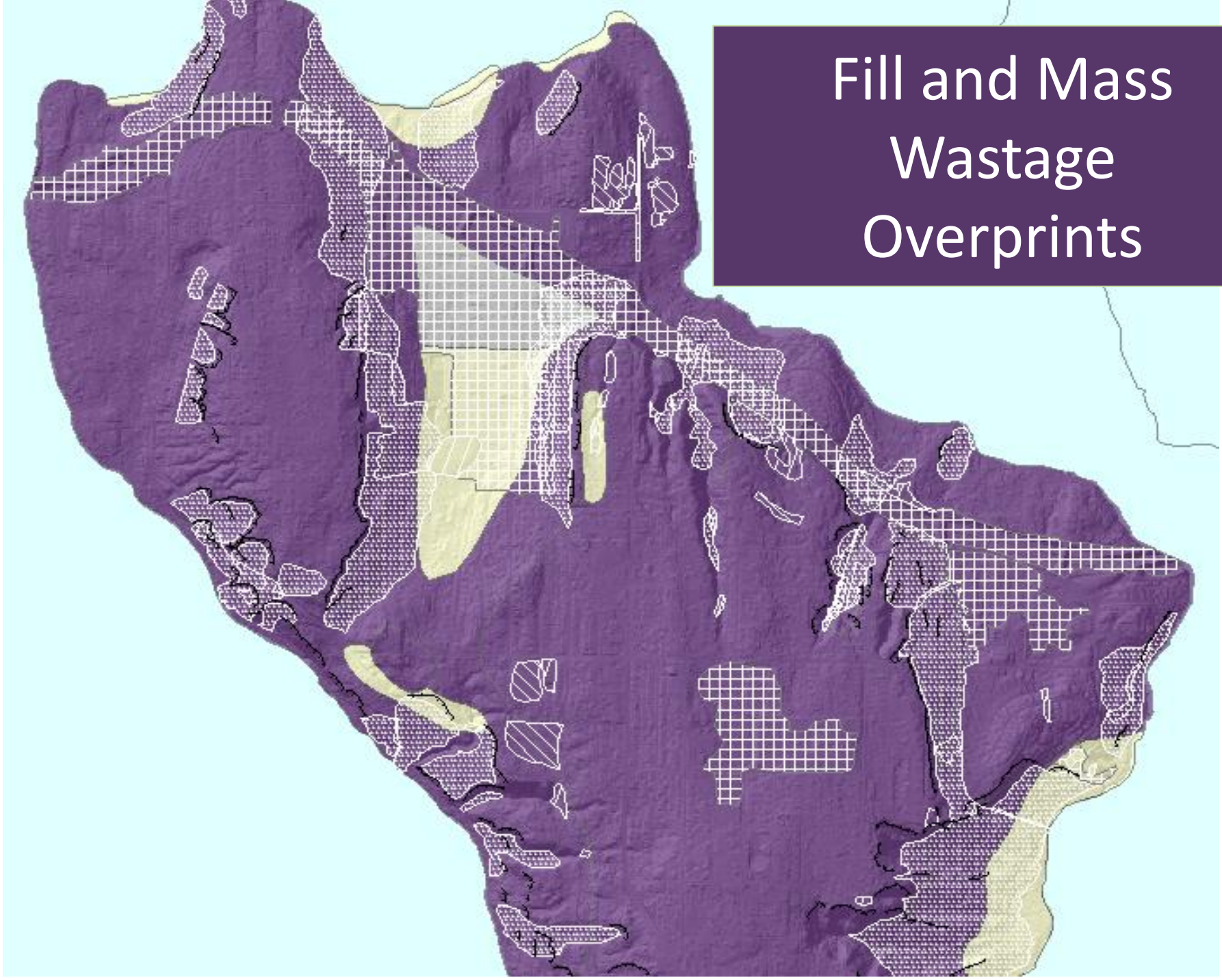



Former lake levels




Each color represents a former lake shoreline line level with loose deposits. The pink was the most recent (not compacted by glacier). Note the proximity with development and transportation features.

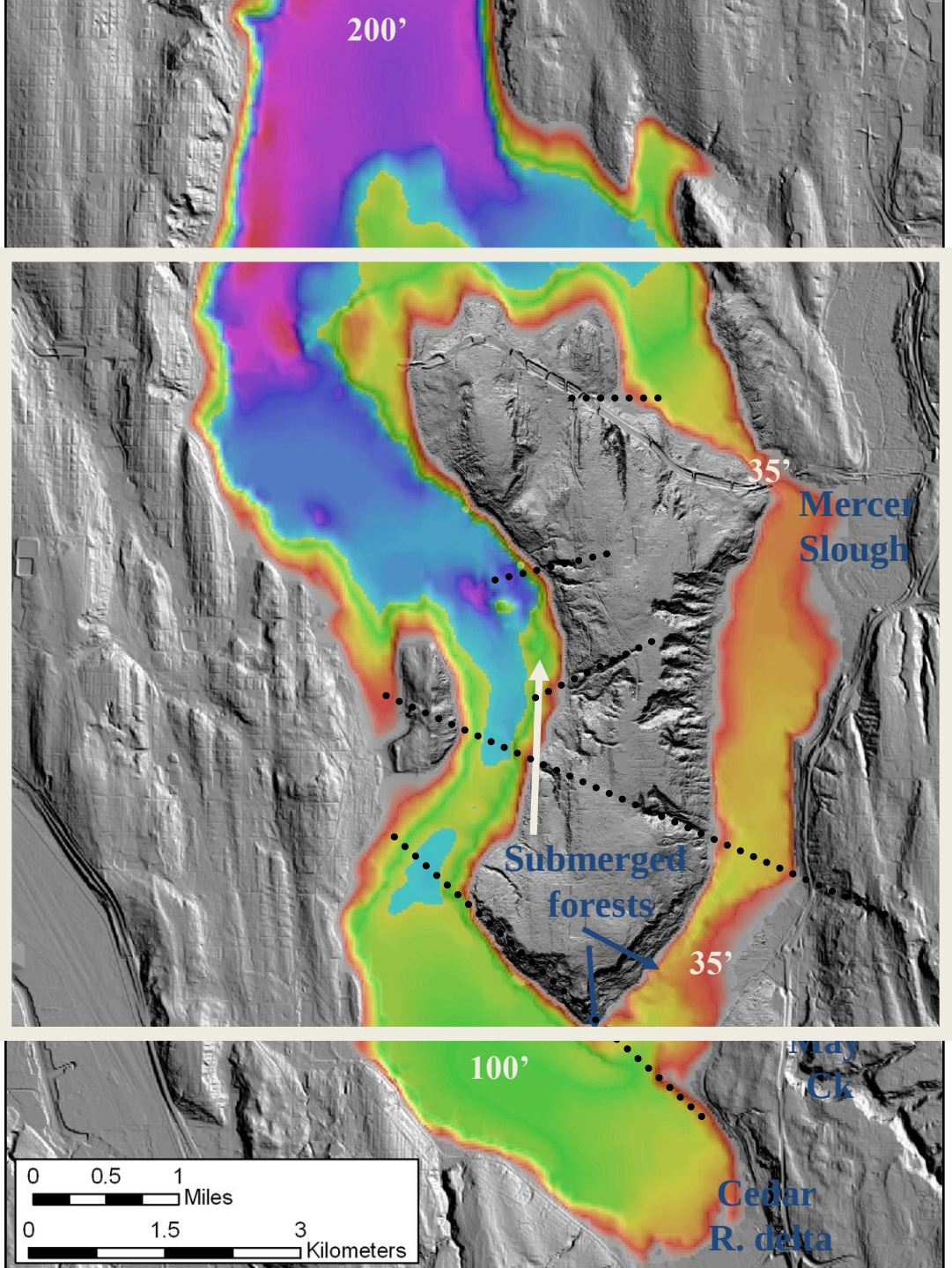
# Fill and Mass Wastage Overprints



# Lake WA Bathymetry & Seismic Data

Submerged forests may have been caused by Earthquake induced landslides 1000 years ago

Ground shaking can bring marginally stable slopes to sudden failure.



# Mercer Island Geology

- Typical Mercer Island hillside soil profile:
  - Very dense silt, sand and gravel (till or hardpan) over very dense sand (advanced outwash) over hard silt and clay (Older Clay)
  - Water sits on top of the clay and exits out of the slope
  - Perfect for landslide conditions

# Landslide Stats

- 62% are shallow colluvial slides (debris flows).
- 18% are deep-seated slides
- ¾ of slides have human related causes (uncontrolled drainage, uncontrolled fill)
- Nearly all slides are water related
- January is top month
- Landslide watch - predictors

# Landslide predictors

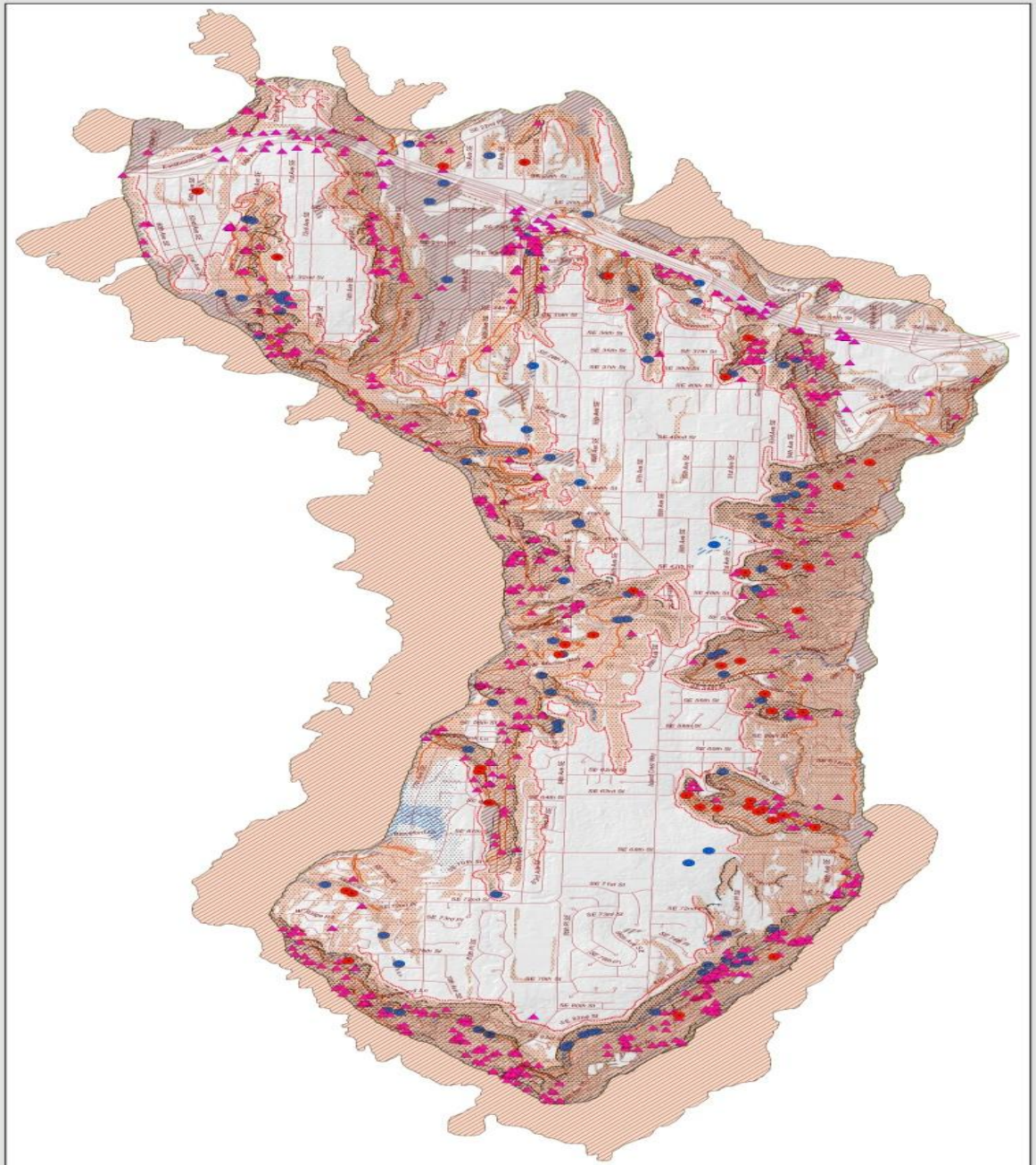
- Geologic Landslide hazard map
- Rainfall monitoring

# Mercer Island Landslide Hazard Assessment

by Kathy G. Troost & Aaron P. Wisher
April 2009

GeoMapNW
geomapnw.ess.washington.edu

0 0.5 1 Kilometers 1:12,000
0 0.5 1 Miles



## LANDSLIDE HAZARD AREAS
(WAC 365-190-080 4d and MICC 19.16.010)

Landslide hazard areas include areas potentially subject to landslides based on a combination of geologic, topographic, and hydrologic factors. They include areas susceptible because of any combination of bedrock, soil, slope (gradient), slope aspect, structure, hydrology, or other factors.

Areas susceptible to landsliding on Mercer Island include:

i. Areas of historic failure or that have been documented on published maps; *See mapped known landslides below;*
ii. Slopes steeper than 15%, intersecting a geologic contact of relatively permeable deposits over relatively impermeable deposits, and with springs or groundwater seepage; *See mapped potential slide areas below;*
iii. Areas that have shown movement during the Holocene epoch (last 10,000 years) or which are covered by Holocene-age mass wasting deposits; *See mapped known landslides below;*
iv. Slopes parallel or sub-parallel to planes of weakness (such as bedding planes, joint systems, and fault planes) in subsurface materials; *None identified on map, but may be locally present;*
v. Slopes having gradients steeper than 80% subject to rockfall during seismic shaking; *See slope classification below;*
vi. Areas potentially unstable as a result of rapid stream incision, stream bank erosion, and undercutting by wave action; *See mapped erosion locations below;*
vii. Areas that show evidence of, or are at risk from snow avalanche; *None identified on Mercer Island;*
viii. Areas located in a canyon or on an active alluvial fan, presently or potentially subject to inundation by debris flows or catastrophic flooding; *None identified on Mercer Island;*
ix. Any area with a slope of 40% or steeper and with a vertical relief of ten or more feet except where composed of consolidated rock; *See slope classification below.*

**Landslide hazard areas include the following mapped areas:**

**Landslide Hazard**
- Landslide Hazard Area (Known or Suspect)
- Landslide Hazard Assessment Setback

**For all other areas hazard is unknown or unquantified**

**Supplemental Data**

**Known Landslides (i,iii)**
- Identified Landslide Location
- Scarp
- Landslide and Mass Wasting Deposits; subaerial and subaqueous

**Slope (v) Class (ix)**
- Slope 80% and higher
- Slope 40-79%

**Potential Slide Area (ii)**
- Slope 15% and higher, and
- Geologic contact of coarse-grained deposits over fine-grained deposits where slope >= 15%, and
- Area where water less than 10 feet below ground surface based on limited data set (other areas of shallow water present), or
- Spring Locations, or
- Spring lines.

**Areas of Rapid Stream Incision (vi)**
- Areas of moderate to rapid stream incision/erosion; may result in unstable slopes and/or stream banks

## GENERAL NOTES FOR GEOLOGICAL HAZARDS MAPS

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# Liquefaction

- What is liquefaction?
  - It's what happens to a saturated loose sand when it's shaken by a vibrational load like an earthquake—turns to quicksand or liquefies
  - Soil looses strength

# Liquefaction (Cont.)

- Conditions conducive to liquefaction:
  - Loose sand (beach deposits, river deposits, hydraulic fill) with shallow groundwater
- Consequences of liquefaction:
  - Settlement
  - Landsliding or lateral spreading

# Assessing a Landslide

- View from safe distance to the side of slide
- Tension cracks indicate pending soil movement
- Is soil wet and/or soft?
- Are there target structures below the slide
- Red tag – unless confident that structure will not be involved

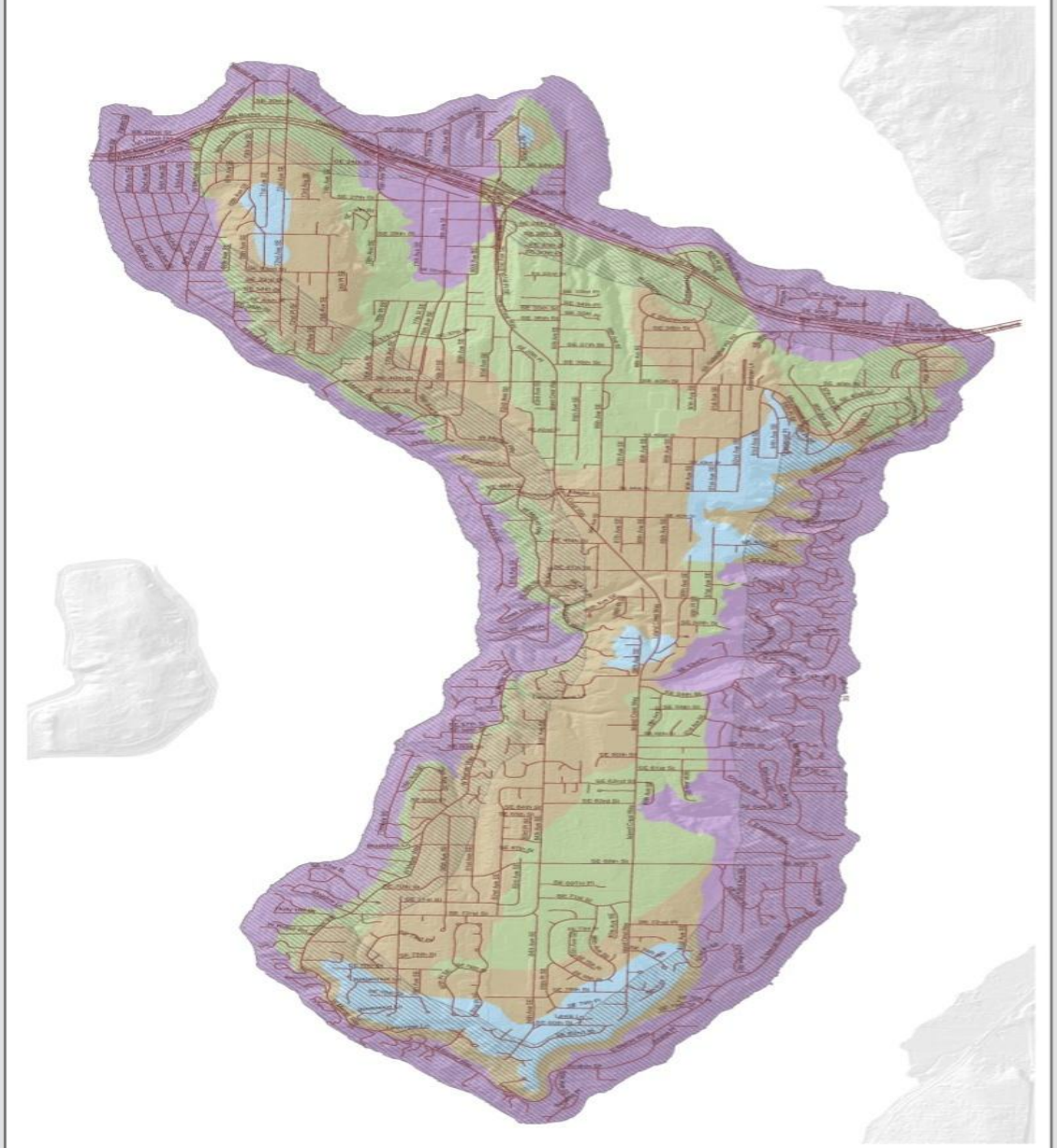
Perkins Lane Landslide, Spring 1998

# Windstorm Susceptibility

- Downed trees caused most damage in previous storms
- No occupancy if tree jeopardizes building (buildings not designed for added weight of tree)

# Mercer Island Wind Exposure and Wind Speed-Up (Topographic Effect)

by Development Services Group (DSG), City of Mercer Island
April 2009



0 0.5 1 Kilometers 1:12,000
0 0.5 1 Miles
N

WIND EXPOSURE CATEGORIES & WIND SPEED-UP FACTORS
(ICC Section 1609 & ASCE 7-05 Chapter 6)

It is the responsibility of the Owner (or their Design Professional) to review site conditions and determine the Kzt factor to be utilized for each specific project. The Kzt factors and wind exposure categories indicated on this map are the minimum values accepted by the City of Mercer Island without requiring the design professional to submit additional calculations and supporting topographic documentation (to verify the values utilized in their wind load determination).

Please note – The Kzt values indicated on this map are approximations based upon periodic calculations of representative samplings around Mercer Island. These values are intended for City of Mercer Island's plan review purposes only.

**WIND EXPOSURE CATEGORIES:**

| Wind Exposure Category | |
|---|---|
| | Exposure 'C' (1500 feet from Lake) |
| | Exposure 'B' (all other areas) |

**WIND SPEED-UP (TOPOGRAPHIC EFFECT) - $K_zt$ Factor :**

| $K_zt$ Factor | |
|---|---|
| | $K_zt = 1.0$ |
| | $K_zt = 1.3$ |
| | $K_zt = 1.6$ |
| | $K_zt = 1.9$ |

**GENERAL NOTES FOR WIND EXPOSURE AND WIND SPEED-UP MAP**

This map is the Wind Exposure Category and Wind Speed-up (Topographic Effects) Map for the City of Mercer Island. This map shows the minimum wind exposure category and the minimum wind speed-up, "$K_zt$" factor, which will be accepted without site specific documentation and calculation.

Other wind speed phenomena may occur on Mercer Island that is not specifically indentified on this map. It is the responsibility of the Owner (or their Design Professional) to review site conditions and determine the appropriate design wind speed and exposure category for their specific project and location.

This map is for the sole use of the staff of the City of Mercer Island's Development Services Group (DSG) for the purposes of permit application evaluation. This map provides DSG staff a general assessment of Wind Exposure Category and Wind Speed-up (Topographic Effects). All areas have not been specifically evaluated and there may be locations that are not correctly represented on this map. It is the responsibility of individual property owners and map users to evaluate risk associated with their proposed development. No site-specific assessment of risk is implied or otherwise indicated by the City of Mercer Island with this map.

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The City of Mercer Island is using guidance provided within ICC Section 1609 & ASCE 7-05 Chapter 6 regarding definitions used when creating this map.

**DEFINITIONS:**

| | |
|---|---|
| $K_zt$ factor: | The topographic effect of wind speed-up at isolated hills, ridges, and escarpments constituting abrupt changes in the general topography, located in any exposure category, that meet all of the conditions noted in ASCE 7-05 Minimum Design Loads for Buildings and Other Structures, Section 6.5.7. |
| Exposure B: | The wind exposure category that applies where the site in question is located a minimum of 1500 feet from the shoreline and the mean roof height is less than or equal to 30 feet per IBC 2006 section 1609.4.3. |
| Exposure C: | The wind exposure category that applies where the site in question is located within 1500 feet from the shoreline per IBC 2006 section 1609.4.3. |
| Wind Speed: | Minimum 85 mph 3-second gust per IRC Figure R301.2(4) |

# Building Susceptibility

- Sites with earthquake induced Landslides, liquefaction, lateral spreading, direct faulting, shaking amplification
- Prior to 1975 seismic residential codes were not in place. (houses were not required to be bolted to foundation) codes were not in place for older houses on stilts, walls of glass (note – no lateral until the mid 70's)
- New Big houses w/ Open floor plans, walls of glass, DESIGNED TO MINIMUM CODE
- Many Essential Facilities & much of Town Center within Seismic Hazard

# Mercer Island's Problems

- Near Faults – 3 types
- Susceptible Soils and Slopes
- Susceptible Construction
- On an Island with Susceptible Roads & Bridges – Supply lines in jeopardy
- Susceptible main water supply 7 sewage disposal

# Mercer Island's Advantages

- Volunteers & evolving Emergency response program
- Outsourcing Resources
- Emergency Well
- Code/Enforcement Improvements -2000
  - Geotechnical Design & Inspection
    - Statement of Risk
  - Structural Engineer Design & Inspection
- Low Unreinforced Masonry inventory

# Worker Safety

- Aftershocks!
  - Don’t go in or near if susceptible to aftershocks
  - Verify adequate lateral capacity remains
    - Shearwalls intact, crack gaps still provides capacity
    - Confident with P-Delta effects
- Tools & Attire – Hard hats, safety boots, etc.
- Buddy System
  - physical dangers; someone always at safe distance
  - Stress symptoms
- Don’t be a mistaken Hero – Stay away!
  - Broken Utilities/Power lines
  - Unstable soils or slopes
  - Animals (dogs, snakes, spiders)
  - Challenging access roads
  - Hazardous materials – occupancies, chemicals, mold, CO, pathogens (keep shots up to date - Hepatitis, tetanus)
  - Take the stairs (no Elevators) & Don’t close racked doors

# Right of Entry to Inspect

- Always seek permission (do not Trespass)
- Do not confront angered owner
- Can assess visibly from street or entry
- We are not enforcement authority
- Can have enforcement authority tag if required.

# Right of Entry to Inspect

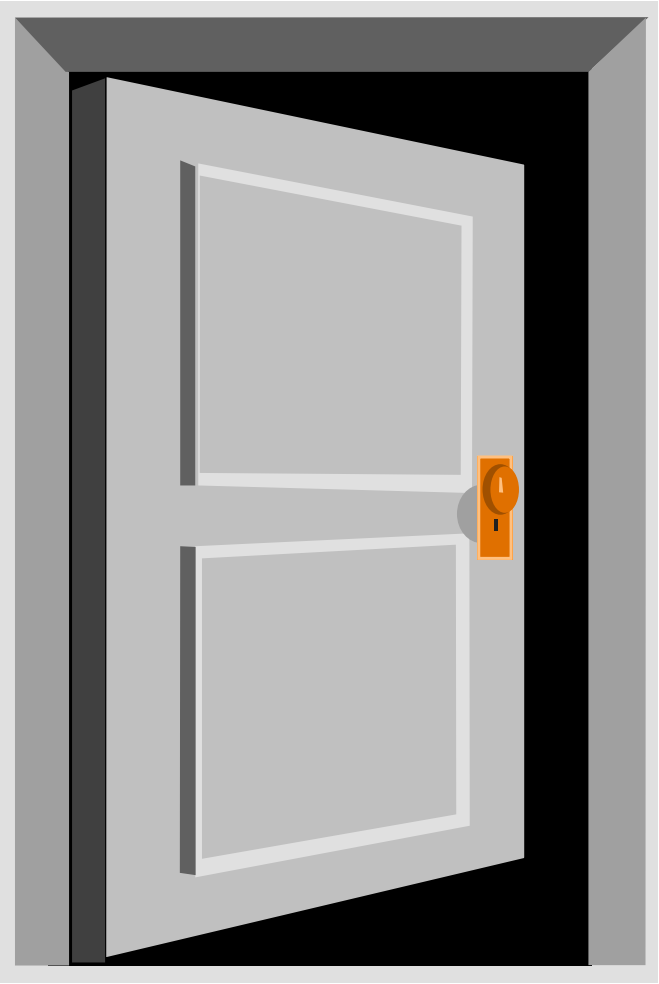
**)1.3 Right of Entry.** When it is necessary to make an inspec-
)n to enforce the provisions of this code, or when the building
ficial or the building official's authorized representative has rea-
)nable cause to believe that there exists in a building or upon a
emises a condition which is contrary to or in violation of this
)de which makes the building or premises unsafe, dangerous or
)zardous, the building official may enter the building or premises
reasonable times to inspect or to perform the duties imposed by
)is code, provided that if such building or premises be occupied
)at credentials be presented to the occupant and entry requested.
such building or premises be unoccupied, the building official
)all first make a reasonable effort to locate the owner or other per-
)ns having charge or control of the building or premises and re-
uest entry. If entry is refused, the building official shall have
:ourse to the remedies provided by law to secure entry.

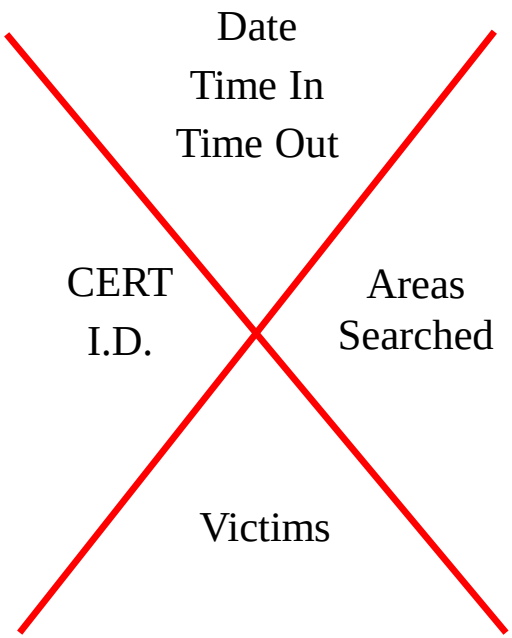
"Authorized representative" shall include the officers named in

# Search Markings

- Upon entering search area:
  - Make a slash
  - Enter info

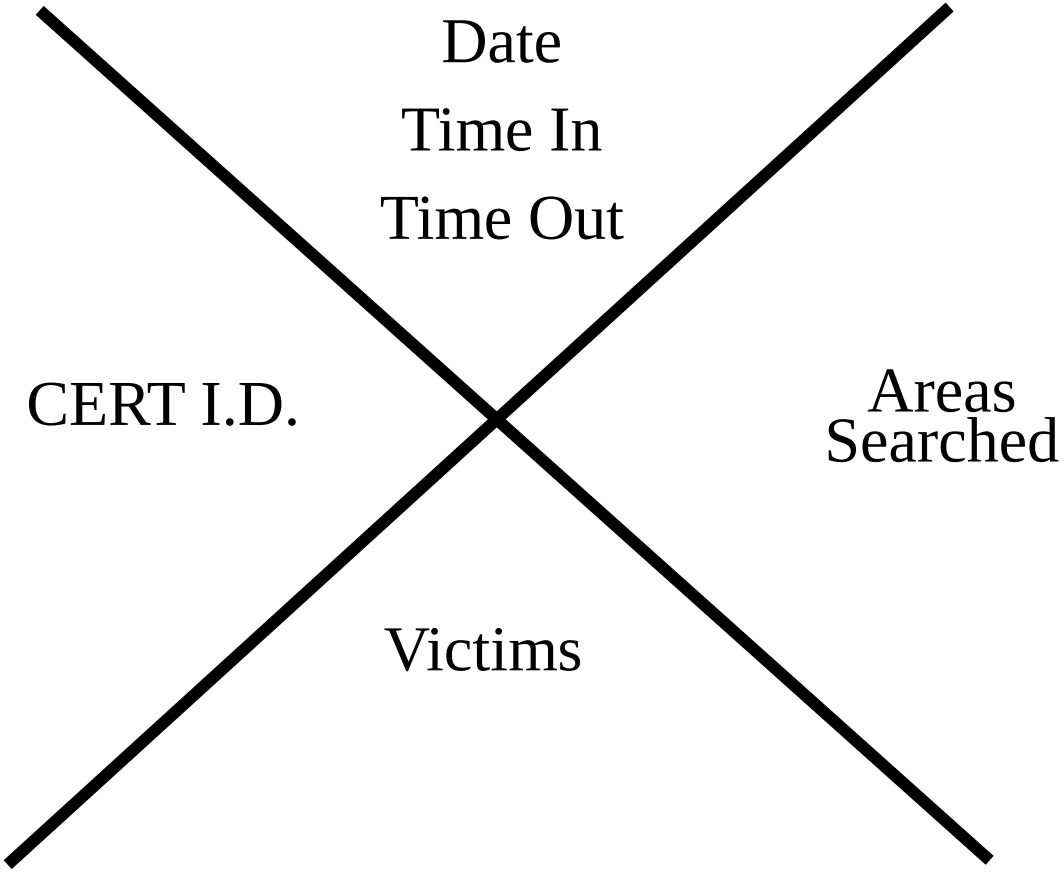
- Upon leaving search area:
  - Complete ‘X’
  - Enter info





# Search Markings

What information do you mark?



# Damage Assessment Priorities List

- Essential Facilities
  - EOC/City Hall
  - Shelters
  - Medical Centers
- Sensitive Populations
  - Schools
  - Health & Elderly Care
- Sensitive Structures
  - Water Tower
  - Churches
  - Multistory Buildings
  - Town Center
- Most Damaged Areas

# Incident Essentials

## ❑ Priorities in any disaster

- ❑ Life Safety
- ❑ Property
- ❑ Environment

## Medical Tagging

| | |
|---|---|
| **Black / white tape** | Dead |
| **Red tape** | critical |
| **Yellow tape** | injured |
| **Green tape** | OK |

## Building Operational Status

| | |
|---|---|
| **Red** | No Entrance to Structure - Critical |
| **Yellow** | Limited Entrance - Critical Functional |
| **Green** | Normal Operations – Structure OK |

# Damage Assessment

## Slight Damage – Green Tag

# Damage Assessment

## Moderate Damage – Yellow Tag

(specified areas usable only)

# Damage Assessment

Heavy Damage – Red Tag – (No Entry)

**Emergency Operation Center Personnel**

**DSG Director** Tim Stewart **/ Backup - DSG Section Chief** Kirsten Taylor

**EOC Phone Bank / Data Entry Personnel**
Holly, Jodi, Analisa (phones) Ali and Linda (data entry)

**Windshield Survey Response Team Lead – George Steirer**
**Inspector Lead – Don Cole**
**Damage Assessment Volunteer Lead – Steve Bryan**

The goal is to do an initial drive through of your assigned area as soon and quickly as possible, reporting back to the EOC your findings.
If the Windshield Survey Response Team comes across a life threatening situation, after reporting the incident, they can assist until help arrives. Otherwise the team's goal is to assess their area as quickly as possible reporting back to the EOC their assessment.

**12 Windshield Survey Teams each assigned to a specific area on the Island**
**Call signs will be area designation, two people to team**

| Area | Last Name | First Name | Call Signs | Cell Number | Vehicle | Radio |
|---|---|---|---|---|---|---|
| | Afzali | Nick | | | | |
| | | | | | | |
| | **Steirer** | **George** | | | | |
| | | | | | | |
| | Davis | Al | | | | |
| | | | | | | |
| | Henderson | David | | | | |
| | | | | | | |
| | McDaniel | Brian | | | | |
| | | | | | | |
| | McWatters | Brian | | | | |
| | | | | | | |
| | Potterf | Mark | | | | |
| | | | | | | |
| | Saunders | Travis | | | | |
| | | | | | | |
| | Serfling | Jimmi | | | | |
| | | | | | | |
| | Skidmore | Paul | | | | |
| | | | | | | |
| | Yamashita | Patrick | | | | |
| | | | | | | |
| | | | | | | |

**Emergency Operation Center Personnel**

**DSG Director** Tim Stewart **/ Backup - DSG Section Chief** Kirsten Taylor

**EOC Phone Bank / Data Entry Personnel**

Holly, Jodi, Analisa (phones) Ali and Linda (data entry)

**Inspector Lead – Don Cole**

**Damage Assessment Volunteer Lead – Steve Bryan**

The goal of the Inspectors is to rapidly assess buildings, allowing evacuated occupants to re-enter inspected safe structures in a timely manner. Or if the structure is deemed unsafe allowing displaced occupants to be evacuated to a safe structure elsewhere. Reporting their findings to the EOC.

**Inspector Team**

| Area | Last Name | First Name | Call Signs | Cell Number | Vehicle | Radio |
|---|---|---|---|---|---|---|
| | Cole | Don | Inspector #1 | | | |
| | | | **Inspector #2** | | | |
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**The following list contains structures/ areas that need to be externally surveyed within your area. Reminder to also check streets, residential houses, etc. not listed.**

| Area | Structure | Location | Phone # | Issue | Date Time | Checked by | Pictures |
|---|---|---|---|---|---|---|---|
| 3 | Community Center at Mercr View (CCMV) | 8236 SE 24th St | (206) 275-7609 | | | | |
| 3 | Youth & Family Services | 2040 84th Ave SE | (206) 236-3525 | | | | |
| 3 | Luther Burbank Park structures | 2040 84th Ave SE | | | | | |
| 3 | Park & Ride | N Mercer Way & 81st Ave SE | | | | | |
| 3 | Mercer Island condos | 2500 81st Ave SE | | | | | |
| 3 | 77th Ave SE Landing | 7670 SE 22nd St | | | | | |
| 3 | South Luther Burbank parking lot | 84th Ave SE & SE 26th St | | | | | |
| 3 | Covenant Shores | 9150 Fortuna Dr | (206) 268-3000 | | | | |
| 3 | Fruitland Landing | 3309 97th Ave SE | | | | | |
| 3 | I-90 East boat launch | 3600 East Mercer Way (under the bridge) | | | | | |
| 3 | I-90 on/offramps east of lid | Exits 7A, 7B, 7C, 8; entrances; HOV ramps | | | | | |
| 3 | 76th Ave I-90 overpass | 76th Ave SE & N Mercer Way | | | | | |
| 3 | 77th Ave I-90 overpass | 77th Ave SE & N Mercer Way | | | | | |
| 3 | 80th Ave I-90 overpass | 80th Ave SE & N Mercer Way | | | | | |
| 3 | Island Crest Way I-90 overpass | Island Crest Way & N Mercer Way | | | | | |
| 3 | "84th Ave" I-90 scenic overpass | 84th Ave SE & SE 28th St | | | | | |
| 3 | Shorewood Drive overpass | Shorewood Dr & Southeast 89th Pl SE | | | | | |
| 3 | North Mercer Way overpass | N Mercer Way & SE 35th St | | | | | |
| 3 | East Mercer Way overpass | E Mercer Way & SE 35th St | | | | | |
| 3 | Nav Adult Family Home | 2233 80th Ave SE | (206) 948-2209 | | | | |
| 3 | Little Acorn Sprouts Toddler | 8236 SE 24th St | (206) 232-0940 | | | | |
| | | | | | | | |
| | | | | | | | |


DSG & MAINTENANCE
EMERGENCY RESPONSE AREAS
Mercer Island, WA
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NOT TO SCALE
EmergencyResponseAreas.mxd

# Advanced Damage Assessment Training

- *Earthquake Susceptibility Overview & Mapping*
- *Fault scenario*
- *Geotechnical considerations*
- *Landslides Susceptibility Overview & Mapping*
- *Windstorm Susceptibility Overview & Mapping*
- *Self-preparedness*
- *EOC Operations*
- *Reporting*
- *Communications*
- *Teams*
- *Sectors*
- *Facility Inspection priority lists*
- *Inspection Gear*
- *Identification*
- *Equipment – radio, cell phone, tools, attire, caution tape, flares*
- *Forms - Facility Inspection priority lists, tags, checklists, handou*
- *Food and health supplies*
- *Inspection policies*
- *Safety, no-risk, aftershock awareness*
- *Clarifying scope of inspection (applicant handouts)*
- *Establishing ability to inspect (permission, warrant, etc.)*
- *Public Interaction and the Public Duty Doctrine*
- *Forms & Recordkeeping*
- *Hazard Inspection Checklists*
- *Tagging system*
- *FEMA Damage Forms*
- *Recordkeeping*
- *Building Assessment – Procedure, building types, and Examples for consistent Tagging*
- *Recovery & Aftershocks*
- *Records & Reports - FEMA*
- *Permitting & Consultants*

# Good Samaritan Law

- Legal protection with conditions:
  - Work within scope of assigned duties
  - Not under the influence of drugs/alcohol
  - Valid drivers license and insurance
  - Follow laws (traffic, etc.)

**Legal Coverage for Emergency Workers**
**WAC 118-04-200**

**Personal responsibilities of emergency workers.**

(1) Emergency workers shall be responsible to certify to the authorized officials registering them and using their services that they are aware of and will comply with all applicable responsibilities and requirements set forth in these rules.

(a) Emergency workers have the responsibility to notify the on-scene authorized official if they have been using any medical prescription or other drug that has the potential to render them impaired, unfit, or unable to carry out their emergency assignment.

(b) Participation by emergency workers in any mission, training event, or other authorized activity while under the influence of or while using narcotics or any illegal controlled substance is prohibited.

(c) Participation by emergency workers in any mission, training event, or other authorized activity while under the influence of alcohol is prohibited.

(d) Emergency workers participating in any mission, training event, or other authorized activity shall possess a valid operator's license if they are assigned to operate vehicles, vessels, or aircraft during the mission unless specifically directed otherwise by an authorized official in accordance with RCW 38.52.180. All emergency workers driving vehicles to or from a mission must possess a valid driver's license and required insurance.

(e) Use of private vehicles, vessels, boats, or aircraft by emergency workers in any mission, training event, or other authorized activity without liability insurance required by chapter 46.29 RCW is prohibited unless specifically directed otherwise by an authorized official in accordance with RCW 38.52.180.

(f) Emergency workers shall adhere to all applicable traffic regulations during any mission, training event, or other authorized activity. This provision does not apply to individuals who have completed the emergency vehicle operator course or the emergency vehicle accident prevention course and who are duly authorized under state law to use special driving skills and equipment and who do so at the direction of an authorized official.

(2) Emergency workers have the responsibility to comply with all other requirements as determined by the authorized official using their services.

(3) When reporting to the scene, emergency workers have the responsibility to inform the on-scene authorized official whether they are mentally and physically fit for their assigned duties. Emergency workers reporting as not fit for currently assigned duties may request a less demanding assignment that is appropriate to their current capabilities.

(4) Emergency workers have the responsibility to check in with the appropriate on-scene official and to complete all required recordkeeping and reporting.

# 15 Volunteer Teams

- Medical
- Search & Rescue
- Child Care
- Animal Shelter
- Damage Assessment
- Transportation
- Administration
- Faith Community
- Sheltering
- Mental Health
- Senior Care
- Well Operations
- Ham Radio/ Communications
- Resources
- Business Liaison

# Mercer Island Volunteer Training

## Community Emergency Response Teams

# CERT Training

**with Mercer Island Additions**

**206-275-7905 or jennifer.franklin@mercergov.org**
www.mercergov.org/emergencyprep

**2012 Volunteer Training Schedule**

| | | | |
|---|---|---|---|
| Saturday March 17, 2012 | *Basic Disaster Prep | 0900-1200 | Council Chambers |
| Saturday April 14, 2012 | Well operation | 0900-1200 | Well site 4320 88th |
| Saturday May 19, 2012 | * CERT Org./ Communications | 0900-1200 | Council Chambers |
| Saturday June 16, 2012 | *Disaster First Aid | 0900-1200 | Council Chambers |
| Saturday July 21, 2012 | Damage Assessment | 0900-1200 | Council Chambers |
| Saturday August 18, 2012 | *Search & Rescue | 0900-1200 | North Fire Station |
| Saturday October 20, 2012 | *Fire Suppression Training | 0900-1200 | Council Chambers |
| Saturday November 17, 2012 | *Disaster Mental Health | 0900-1200 | Council Chambers |
| Saturday December 15, 2012 | *Terrorism Response Training | 0900-1200 | Council Chambers |
| Saturday January 19, 2013 | *Final Test / Graduation | 0900-1200 | Council Chambers |
| February 2013 | Red Cross Shelter Class | | |

*** Denotes Class needed for CERT Certification, other classes are optional and specific to MI.**